



## TITLE OF INVENTION

### MULTI-STAGE DRY VACUUM PUMP FOR HIGH VACUUM APPLICATIONS

## ABSTRACT

This present invention provides for an improved and updated design of Nikola Tesla's High Vacuum Pump design adapted from his fluid propulsion Patent # 1.061.142, May 6, 1913 and Turbine Patent # 1.061.206, May 6, 1913, to be used specifically for the Semiconductor, Aerospace, Automotive, Healthcare & Pharmaceutical, and Food Preparation, Industries. The new design incorporates the same basic principles as Tesla's however there are many improvements as to airflow design through the pumping chambers coupled with the use of new and better materials, better metals as well as some composites, along with coatings such as Teflon etc to minimize internal corrosion on the exposed surfaces due to varied processes within these industries some of which are highly corrosive. The new improvements also include variable speed motor controls allowing integrated systems to control the speed and relative pressures of the pumps performance. Varied number of stages can be incorporated as to the required base pressure needed for different applications.

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Field of Search: 418/9, 415/9, 415/201, 415/202

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